

# A METHOD FOR TEMPORARY ATTACHMENT OF A CLOTH BONNET ONTO A FOAM PAD

## BACKGROUND OF THE INVENTION

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### 1. field of the Invention

The present invention relates to a method for temporarily attaching a bonnet of cloth onto a commercial buffering pad to be used in conjunction with a high-speed rotary machine for polishing the exterior of a vehicle.

### 2. Description of Related Art

Car detailers apply wax compounds and utilize a cloth, sponge, or round buffering pads to an exterior surface of a vehicle in order to provide a shiny appearance to the exterior. Detailers accomplish the glossy finish by use of different buffering/polishing techniques which are;

(a) orbital buffering machine, (b) high-speed rotary machine, (c) hand cloth/mitten to rub wax compounds onto the exterior of the vehicle which gives a polished appearance. The process of buffering/polishing the exterior depends on the condition of the surface of the exterior which may have light-to-moderate oxidation or light superficial scratches whereby the detailer will apply specific wax compounds and utilize diverse buffering/polishing pads to condition the exterior before completing the was polishing of the exterior. The process of machine buffering and/or hand polishing is typically repeated each time the detailer applies wax to different portion of the vehicle. Often times, due to fatigue or tiresome hand polishing or machine buffering, the detailer may forget to change-out the hand cloth or buffering pad, which will delay the detailer in completing the polishing of the vehicle in a timely manner. In an attempt to remedy the aforementioned problems, some detailers resort to cloth hand mittens or orbital buffering machine. Hand cloth mittens are very tiresome to use due to the repetitive hand/arm movement to achieve a polished finish on the exterior. The orbital machine has, to some extent, alleviated the tiresome, repetitive motion, but the orbital buffering machine bonnet can cause "heat-swirls" due to the inability of the cloth bonnet to properly dissipate the heat caused by the friction of the cloth bonnet

coming into contact with the surface being buffed/polished. Also, the limited buffing speed (revolutions-per-minute) of the orbital machine does not achieve the desired polished finish required by the car detailer, which in turn, has to make several attempts with the orbital machine to do away with "heat-swirls" prompting the user revert to a hand cloth/mitten to complete the glossy finish on the exterior surface.

Therefore, there is a need for a method for attaching a buffing/polishing bonnet onto a commercial foam pad utilizing a high-speed *rotary* machine to buff/polish an exterior surface and to disperse heat generated by the buffing/polishing process making it convenient and immediate for the car detailer using a high-speed *rotary* buffing/polishing of exterior surface without the shortcomings of the prior art.

#### SUMMARY OF THE INVENTION

The present invention provides a method for temporarily attaching a bonnet of cloth onto a commercial foam pad that addresses the shortcomings of the prior art. In particular, pursuant to the invention, users may temporarily attach a bonnet of cloth onto a commercial foam pad to be used in conjunction with a high-speed *rotary* machine. In this manner, the user can expediently and without additional fatigue achieve a glossy, polished finish to the exterior surface without becoming encumbered or wearisome.

Pursuant to a first embodiment of the invention, a round commercial foam pad attachment includes a perforated neoprene rubber material with a primary function to allow heat to dissipate from the exterior surface, and a secondary function to act as a cushion for the polyester/polyamide cloth material, and a third function to facilitate the polyester/polyamide cloth material to grip the commercial foam pad front surface.

The perforated neoprene rubber material is attached to the back-side of the polyester/polyamide cloth material. The size of both the perforated neoprene rubber material and polyester/polyamide cloth material to be attached to a thin nylon material which encases a nylon string. The size of aforementioned circular materials to be sufficiently larger to wrap over standard commercial foam pad. In this manner, the bonnet unit can fully wrap over foam pad and be cinched tight by draw string to ensure proper alignment.

Pursuant to a second embodiment, a round commercial foam pad attachment device includes flat BUNGEE ® which is affixed to the perforated neoprene and polyester/polyamide material. Affixed to the flat BUNGEE ® shall be VELCRO ® (hook and loop fastener) four "hook" fasteners located approximately 45 degrees from each other. The size of both the perforated neoprene and polyester/polyamide material be of sufficient size to wrap over standard commercial foam pad which has VELCRO ® (hook and loop fastener) "loop" located at back of foam pad. In this manner, the bonnet unit can fully wrap over commercial VELCRO ® "loop" backed foam pad and VELCRO ® "hook" fasteners shall be of sufficient length to ensure proper mating of VELCRO ® "looped" back foam pad and aforementioned bonnet with VELCRO ® "hook" tabs which are part of the bonnet unit.

Pursuant to a third embodiment, a round commercial foam pad attachment device includes polyester/polyamide cloth material to be adhered to the typical front side of commercial foam pad and between the front side surface of commercial foam pad and backside of polyester/polyamide cloth material there shall be a thin perforated compressed neoprene material to act as a medium for applying adhesive and have a primary function to allow heat to dissipate from the exterior surface, and a secondary function to act as a cushion for the polyester/polyamide cloth material. The invention can generally be adhered onto standard commercial foam pad by above-mentioned procedure or be produced via a newly manufactured circular foam pad specifically for applying aforementioned cloth material by the aforementioned process.

A more complete understanding of the method and system for temporarily attaching of cloth bonnet onto foam pad intended for use with a high-speed *rotary buff/polish* machine will be afforded to those skilled in the art, as well as an understanding of additional advantages and objects thereof, by a consideration of the following detailed description of the preferred embodiment. Reference will be made to the appended sheets of drawings which will first be described briefly.

### BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a perspective view of several embodiments of a generally round bonnet of cloth attachment device, temporarily attached to a generally round commercial foam pad;

5 Fig. 2 is a perspective view of a first embodiment of a generally round bonnet of cloth attachment device of the invention attached to a high-speed *rotary* machine;

Fig. 3 is a perspective view of a first embodiment of a generally round bonnet of cloth attachment device of the invention;

10 Fig. 4 is a perspective view of second embodiment of a generally round bonnet of cloth attachment device of the invention attached to a high-speed *rotary* machine;

Fig. 5 is a perspective view of the second embodiment of a generally round bonnet of cloth attachment device of the invention;

15 Fig. 6 is a perspective view of the third embodiment of a generally round bonnet of cloth attachment device of the invention attached to a high-speed *rotary* machine;

Fig. 7 is a perspective view of the third embodiment of a generally round bonnet of cloth attachment device of the invention;

20 Fig. 8 is a flow chart of a method pursuant to aspects of the invention.

### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

The present invention is directed towards a method for temporarily attaching a polyester/polyamide cloth bonnet onto a commercial foam pad and cloth bonnet equipped with perforated neoprene backing to dissipate heat from friction of buffing/polishing process. In particular, the present invention is directed to a method in which a user, such as a car detailer, buffs wax or other compounds, by means of a high-speed *rotary* machine and foam pad, to an exterior surface in order to provide a glossy shine to the exterior surface. Pursuant to aspects of the invention, the user 25 may place the commercial foam pad into the polyester/polyamide cloth bonnet holder and secure by means of the different attachment methods and connect the bonnet unit by means of a positive or negative VELCRO® (hook and loop fasteners) 30 backing plate which is then secured to a high-speed *rotary* machine. In this manner, the user may then buff the exterior surface.

the commercial foam pad is securely attached to the polyester/polyamide cloth bonnet with a perforated neoprene backing material and the user can expediently and conveniently complete the buffing/polishing without creating wax swirl marks on the exterior surface.

5 Fig. 1,2,4, & 6 shows several embodiments of different foam pad attachment devices, 100, 200, & 300 temporarily attached to a generally round foam pad 22. the user may temporarily attach or replace the polyester/polyamide cloth bonnet attachment device 100, 200, & 300 onto foam pad 22 and foam pad 22 and attachment device 100, 200, & 300 to be secured to a VELCRO® (hook and loop fastener) backing which is secured to a high-speed *rotary* machine conveniently.

10 Fig. 3 shows a first embodiment of a foam pad attachment device 100 onto a generally round foam pad 22 positioned within the assembly. As shown in Fig. 3, device 100 is assembled in the following manner; polyester/polyamide cloth material 102 has a perforated neoprene material 104 backing and materials 102 and 104 are attached to a thin nylon material 106 which encases a nylon string 108 to cinch 15 device 100 onto foam pad 22.

Fig. 5 shows a second embodiment of polyester/polyamide cloth bonnet attachment device 200 with a generally round foam pad 22 positioned within the assembly. As shown in Fig. 4, device 200 assembled in the following manner; the polyester/polyamide cloth bonnet material 102 has a perforated neoprene material 104 backing and materials 102 and 104 are attached to an flat BUNGEE® 202 which is affixed to the circumference of materials 102 and 104. Affixed to the flat BUNGEE® is VELCRO® (hook and loop fastener) four "hook" fasteners located 20 approximately 45 degrees from each other. The size of both the perforated neoprene and polyester/polyamide material to be of sufficient size to wrap over standard foam pad which has VELCRO® (hook and loop fastener) "loop" at back side of foam pad. The entire device 200 assembly is secured onto foam pad 22 by device 200 VELCRO® (hook and loop fastener) "hook" 206 onto the backside of 25 foam pad 22 which has existing VELCRO® "loop" backing.

30 Fig. 7 shows a third embodiment of polyester/polyamide cloth bonnet attachment device 300 with a foam pad 22 positioned within the assembly. As shown in Fig. 6-7, device 300 is assembled in the following manner; the polyester/polyamide cloth material 102 is adhered to a thin perforated compressed neoprene material 302

to allow heat to dissipate from the exterior surface and give sufficient cushion support for polyester/polyamide material 102 and thin perforated compressed neoprene 302 is adhered to front side of foam pad 22. the invention can normally be adhered to a standard foam pad after being produced/manufactured by the above mentioned procedure or can be generally assembled during the manufacturing of foam pad 22.

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Having thus described a preferred embodiment of a method for temporarily attachment of cloth bonnet and dispersal of heat from exterior surface/bonnet, it should be apparent to those skilled in the art that certain advantages of the aforesaid method have been achieved. It should also be appreciated that various modifications 10 adaptations, and alternative embodiments thereof may be made within the scope and spirit of the present invention. For example, the generally round foam pad attachment device using the aforementioned attaching methods as the attachment device has been illustrated, but it should be apparent that the inventive concepts described above would be equally applicable to other foam pad attachment devices, 15 such as attachment devices comprising zipper mechanisms, buckle closure system, or clip devices. The invention is further defined by the following claims.